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FAQs on Shisha: Past, Present & Future by PRP Azra

The increasing popularity of shisha smoking in Europe and Arabic world has created a new culture among the urban communities in Malaysia. Shisha smokers may or may not start on tobacco smoking⁴. According to Global Adult Tobacco Survey 2011, it was found that more than 123,000 Malaysians were smoking shisha regularly. Many viewed shisha smoking with friends as affordable leisure activity^{1,4}. The sweetened fruity taste of shisha mask the irritating taste of tobacco thus makes it more attractive and a pleasant experience.

The History of Shisha

Shisha also known as 'waterpipe' is a 400-year old method where tobacco is passed through a water pipe before being inhaled¹. The typical session of shisha smoking varies between individuals which took at least one hour up to several hours. The equipment consists of a head, body, water bowl and the hose (Figure 1)⁶. The bowl is half filled with water. When the smoker inhaled, the smoke passes through the water, thus, the toxins in high concentrations is absorbed before making its way to the smokers. The community of shisha smokers believes shisha smoking is less addictive, less carbon monoxide, no nicotine and not as harmful as smoking since the shisha smoke is presumed to be filtered by the water which later remove the toxic agents^{1,2,5}.

What is in Shisha pipes?

In general, shisha smoke contains carbon monoxide, nicotine, tar and heavy metals^{2,3}. According to research carried out by World Health Organisation (WHO) in 2005, an hour long of shisha session is as bad as a regular smoker who took 100 to 200 cigarettes at one time. The amount of nicotine in one shisha smoke is equal to 200 times of cigarette smoke⁶. Some studies claimed higher levels of arsenic, lead, nickel, nicotine and carbon monoxide in shisha smoke compared to cigarette smoke. The amount of carbon monoxide released in a shisha smoke was claimed to be in between 0.3 -1.4%. However, contradicting to WHO findings, a study by Royal University of Saudi Arabia found only 142 chemicals compared to 5000 chemicals identified in cigarette⁷.

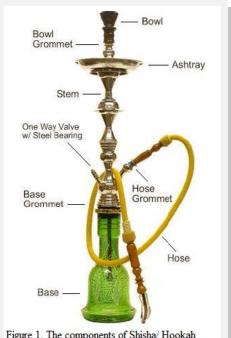


Figure 1. The components of Shisha/ Hookah

Is Shisha good for my health?

A list of studies reported increasing risk of tuberculosis, hepatitis and several types of cancer such as lung, bladder and oral cancer². As difficult as it can be for a smoker to quit, similar pattern were seen between shisha smokers. The common perception that shisha is not as addictive as cigarettes were proven to be wrong^{1,2}. Shisha has been associated with decreased in pulmonary function and increased risk in respiratory disease related to high concentration of carbon monoxide²⁻⁵.

Shisha and Muslim in Malaysia

Meanwhile, the Malaysian Islamic Development (JAKIM) issued a fatwa (ruling advice suggested by religious authorities) to ban shisha since according to the enough scientific evidence, it cause more harm than good to health. Currently, Melaka, Perlis and Kelantan has announced shisha is forbidden or 'haram' for muslims.

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Adverse Drug Reactions in UKMMC 2013 by PRP Kok Yi



For the past few months in 2013, the highest ADR reported were the drugs belonging to the immuno-modulating and antineoplastics class (52%), followed by anti-infectives (24%). Other classes of drugs that were less reported were the blood and blood-forming organs (8%), cardiovascular system (4%), musculo-skeletal system (4%), alimentary tract and metabolism (4%), and herbal supplements (4%). Chemotherapeutics class is commonly known to cause ADR and toxicities in patients, hence patients are monitored closely for ADRs & complica-

tions that arise during chemotherapy sessions or post-chemo.

Anti-infectives on the other hand can commonly cause notable allergic or hypersensitivity reactions. In worst case-scenario, the hypersensitivity reactions can be lethal and cause severe serious skin reactions like Steven-Johnson Syndrome (SJS, Toxic Epidermal Necrosis (TEN) and Drug-induced Rash with Eosinophilia & Systemic Symptoms (DRESS Syndrome).

Below are the highlights of some ADRs that occurred in UKMMC for the past year of 2013:

Thrombolytics

In an ADR report, IV Tenecteplase lead to subacute haemorrhagic stroke when it was indicated as the treatment of STEMI.

Herbals

In an ADR report, Mak Jun Bawang Putih caused hypokalemia-induced cardiac arrhythmia.

Immunosuppressants

4 patients were reported to have experienced hot flushes and hypertension after taking cyclosporine oral capsules.

Chemotherapy

A patient with advanced breast cancer was on chemo regimen of 5-Fluorouracil, Epirubicin, Cyclophosphamide, and Trastuzumab. Patient

Adverse Drug Reactions Report by Pharmacological Group (Jan - July 13) Herbal supplements Pharmacological Class Alimentary Tract and Metabolism Musculo-Skeletal System Cardiovascular System Blood/Blood Forming Organs Antineoplastic/Immunomodulatin... 13 **Antiinfectives** 0 2 6 8 4 10 12 No. of Reports

developed supraventricular tachycardia suspected secondary to Trastuzumab-induced cardiomyopathy. Cardiogenic shock and cardiac failure ensues.

Side effects can happen anytime, anywhere. even with good and precautionary measures. It is unwanted but sometimes unpredictable. Monitoring is thus very important to prevent or prevent progression of ADRs. Taking note of hepatic and renal function can help determine the appropriate safer dose that likely prevents dose-related ADR.

The Drug Information Pharmacy Dept appreciate all the ADR reports received and thus hope to receive more ADR reporting from both pharmacists and doctors, as future drug safety depends on the vigilance of healthcare professionals in reporting suspected ADRs to regulatory authorities and on facilitating the reporting of ADRs by patients.

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